

REMARKS/ARGUMENTS

Claims 1-15 and 17-25 are currently pending in the present patent application along with newly added claim 26. Claims 1-6, 9-14, and 21 have been allowed.

In Section 3 of the Office Action mailed June 29, 2010, the Examiner notes with regard to the declaration filed May 3, 2010 that the Post Office address for inventor John Downing has not been indicated and that a cross-out for the residence address of inventor Paul I. Egbert that has not been initialed. These omissions have been corrected in the revised declaration that accompanies this amendment.

In Sections 4 and 5 of the instant Office Action, the Examiner rejects claims 7, 8, 15, 17-20 and 22-25 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The antecedent basis and other issues noted by the Examiner have been corrected through the above claim amendments. These amendments do not narrow the scopes of the amended claims. Claims 7, 8, 15, 17-20 and 22-25 satisfy Section 112 and the rejections of these claims on this basis should be withdrawn.

The Examiner, in Sections 6 and 7 of the Office Action, rejects claims 17-20 and 23-25 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner states that the recited methods are not tied to a particular machine or apparatus and do not particularly transform a particular article to a different state or thing.

Amended method claim 17 recites a method of detecting and indicating detection of short-burn threats that includes sensing radiation within a field of view, generating a single detection signal in response to the sensed radiation, analyzing the single detection signal as a function of time and detecting from the analysis whether the single detection signal indicates a short-burn threat has occurred within the field of view. The operation of analyzing the single detection signal as a function of time includes comparing the single detection signal to a plurality of temporal templates,

each temporal template being associated with a particular type of short-burn threat, and determining a short-burn threat exists when the single detection signal approximately matches one of the temporal templates. Finally, the method includes generating a signal indicating a short-burn threat exists, the signal including parameters assigned to the short-burn threat to facilitate subsequent identification of a more precise location of the short-burn threat.

While the Supreme Court recently indicated in *Bilski* that the machine-or-transformation (MOT) test is not the exclusive test for determining whether a method or process is directed to patent-eligible subject matter, the Court nonetheless indicated that the MOT is nonetheless a useful tool in making this determination. Amended claim 17 satisfies the transformation prong of the MOT test in that sensed radiation (from a short-burn threat such as an RPG or tank shell) is transformed into a signal that indicates that a short-burn threat exists. This signal includes parameters assigned to the short-burn threat to facilitate subsequent identification of a more precise location of the short-burn threat, as discussed with regard to the embodiment of the invention discussed in paragraph 30 et seq. Thus, sensed radiation is transformed into a signal indicating a short-burn threat exists and providing additional information about this threat in form of the associated parameters.

The process recited in amended claim 17 is therefore directed to patent-eligible subject matter under Section 101 as satisfying the transformation prong of the MOT test and is accordingly in condition for allowance. Dependent claims 23 and 26 are allowable for at least the same reasons as claim 17 from which they depend and due to the additional limitations added by each of these dependent claims.

Amended independent claim 18 recites a method of detecting and identifying the location of short-burn threats. The method includes sensing radiation within a field of view, generating a single detection signal in response to the sensed radiation, analyzing the single detection signal as a function of time, detecting from the analysis whether the single detection signal indicates a short-burn threat exists within the field of view, and capturing images of the field of view being sensed. When it is detected

that a short-burn threat exists, the method includes analyzing the captured images to identify more specifically a location of the short-burn threat.

Once again, this recited method is patent-eligible at least because it satisfies the transformation prong of the MOT test. Sensed radiation somewhere within a field of view is transformed into detection of a short-burn threat and, when such a short-burn threat is detected, the captured images are, in turn, transformed into a more specific location of the short-burn threat within the field of view. Accordingly, amended independent claim 18 is directed to patent-eligible subject matter under Section 101 as satisfying the transformation prong of the MOT test and is accordingly in condition for allowance. Dependent claims 19, 20, and 24 are allowable for at least the same reasons as claim 18 from which they depend and due to the additional limitations added by each of these dependent claims.

Amended independent claim 25 recites a method of detecting short-burn threats including sensing radiation within a field of view, generating a single detection signal in response to the sensed radiation, analyzing the single detection signal as a function of time, and detecting from the analysis whether the single detection signal indicates a short-burn threat has occurred within the field of view. The operation of analyzing the single detection signal as a function of time includes comparing the single detection signal to a plurality of temporal features, with unique combinations of temporal features comprising a temporal template being associated with a particular type of short-burn threat and determining a short-burn threat exists when the single detection signal approximately matches one of the temporal templates. The method also includes generating a signal indicating a short-burn threat exists.

In amended method claim 25 the recited method satisfies the transformation prong of the MOT test, transforming sensed radiation within a field of view into a signal indicating a short-burn threat exists. This claim covers the embodiment of Figure 2, for example. As a result, amended claim 25 recites patent-eligible subject matter, satisfies Section 101, and is in condition for allowance.

The present patent application is in condition for allowance. Favorable consideration and a Notice of Allowance are respectfully requested. **Should the Examiner have any further questions about the application, Applicants respectfully request the Examiner to contact the undersigned attorney at (425) 732-4624 to arrange for a telephone interview to discuss the outstanding issues.** The Commissioner is hereby authorized to charge any deficiency of fees submitted herewith, or credit any overpayment, to Deposit Account No. 19-0130.

Respectfully submitted,
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